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JAN 30 2007

Application No. 10/625,811

REMARKS

In the Office Action dated August 30, 2006, claims 1, 5-8, 12, 16, 21, 22 and 33 were rejected under 35 U.S.C. 102(b) as being unpatentable over Thornton et al. (U.S. Patent 6,208,681) Claims 15 and 17 were objected to as being based on a rejected base claim. In response, Applicant has rewritten claim 15 and 17 in independent form. The remaining claims were rejected under 35 U.S.C. 103.

In order to clarify the understanding of the issues, Applicant called Examiner in a telephone conference. Applicant respectfully disagreed with the prior Office Action's statement that evanescent fields causing mode coupling is an inherent characteristic of Thornton. In particular, it is believed that the oxide walls in Thornton either completely or substantially surround the aperture to provide sufficient optical and electrical confinement for lasing and thus does not permit sufficient evanescent waves to cause mode locking. If Examiner desires and believes it to be helpful, Applicant can generate computer models or computations to show why sufficient evanescent fields of Thornton to generate mode locking are believed to be not present. Applicant's' Figure 8 shows a substantial opening 828 between adjacent laser aperture 832, 836. Examiner agreed to study the issue of the "gap' more closely but suggested that Applicant further amend the claim to distinguish Thornton by including the top contact 316 of Figure 3. The top contact simultaneously provides current to multiple lasers.

Applicant respectfully submits that recitation of such a top contact is not necessary to patentability as the absence of openings in the oxide wall of Thornton of sufficient size to induce mode coupling is believed to be sufficient. However, to expedite prosecution of this patent, Applicant has amended the independent claims to also recite the top contact or to recite a high gain coupling region in the oxide wall openings.

In view of the preceding amendments and remarks, Applicant respectfully submits that the claims as amended are allowable over the cited prior art reference, and allowance is hereby respectfully requested.

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No additional fee is believed to be required for this amendment. However, the undersigned Xerox Corporation attorney (or agent) hereby authorizes the charging of any necessary fees, other than the issue fee, to Xerox Corporation Deposit Account No. 24-0025. This also constitutes a request for any needed extension of time and authorization to charge all fees therefor to Xerox Corporation Deposit Account No. 24-0025.

In the event that the Examiner believes a teleconference would facilitate prosecution, Applicant respectfully requests that Examiner contact the undersigned.

Respectfully submitted,

Kent Chen

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(310) 333-3663 January 30, 2007